

REMARKS

Claims 1-10, 15, 17-18, and 21 are pending in the application. Claims 1 and 7 are independent. By the foregoing Amendment, Applicants have amended claims 1, 7, and 10, and have canceled claim 16. It is believed that these changes introduce no new matter and their entry is respectfully requested.

Rejection of Claims 7-10 and 15-18 Under 35 U.S.C. §102(b)

In paragraph 4 of the Office Action, the Examiner rejected claims 7-10 and 15-18 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,434,175 to Zah (hereinafter "Zah"). A claim is anticipated only if each and every element of the claim is found in a reference. (MPEP §2131 *citing Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)). The identical invention must be shown in as complete detail as is contained in the claim. *Id. citing Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989)). Applicants respectfully traverse the rejection.

Amended claim 7 recites in pertinent part "a set of optical amplifiers formed in the integrated optical circuit, an individual optical amplifier being a silica-based optical amplifier having a silica-based core, *an individual optical amplifier having an evanescent coupler to combine pump light with optical signal light*, an individual optical amplifier having a gain section to amplify the combined pump light and optical signal light" (emphasis added). Support for these changes can be found at page 7, lines 10-17 of Applicants' Specification according to an embodiment of the present invention.

Applicants respectfully submit that Zah fails to teach or suggest "an individual optical amplifier having an evanescent coupler to combine pump light with optical signal light" as recited by claim 7. With regard to claim 16, the Examiner appears to be saying that the gain element 310 of Zah is a pump light source that provides pump light to the gain elements 118 of Zah. Applicants respectfully disagree with the Examiner's characterization of Zah. Applicant's respectfully submit that Zah is clear column 6, lines 38-40 that "the output optical element 310 selects the wavelength comb of the phasar 320 to be tuned and has no

other purpose.” Zah does not mention evanescent coupling, evanescent couplers, or specifically that the optical element 310 is an evanescent coupler or performs evanescent coupling of pump light with optical signal light.

Applicants respectfully submit that because Zah fails to teach or suggest “an individual optical amplifier having an evanescent coupler to combine pump light with optical signal light” Applicants respectfully submit that Zah fails to teach each and every element of the claimed invention as recited in claim 7. Applicants respectfully submit that because Zah fails to teach each and every element of the claimed invention Zah fails to anticipate the claimed invention as recited in claim 7. Accordingly, Applicants respectfully submit that because Zah fails to anticipate claim 7 that claim 7 is patentable over Zah. Applicants respectfully submit that claims 8-10, 15, and 17-18 properly depend from patentable claim 7 and are therefore patentable over Zah as well. Applicants have canceled claim 16, which renders the rejection of it moot. Applicants respectfully request that the Examiner reconsider and remove the rejection to claims 7-10 and 15-18.

Rejection of Claims 1-6 and 21 Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected claims 1-6 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Zah in view of common knowledge in the art. To establish a *prima facie* case of obviousness, an Examiner must show three things: (1) that there is some suggestion or motivation to modify a reference or combine reference teachings to arrive at the claimed invention, (2) that there must be a reasonable expectation of success, and (3) that the references teach or suggest each and every element of the claimed invention. (MPEP §2143.) Applicants respectfully traverse the rejection.

Amended claim 1 recites in pertinent part “a set of optical amplifiers formed in the integrated optical circuit, an individual optical amplifier being a silica-based optical amplifier, an individual optical amplifier having *an evanescent coupler to combine pump light with optical signal light*, an individual optical amplifier having a gain section to amplify the combined pump light and optical signal light” (emphasis added). Support for

these changes can be found at page 7, lines 10-17 of Applicants' Specification according to an embodiment of the present invention.

Applicants respectfully submit that Zah fails to teach or suggest "an evanescent coupler to combine pump light with optical signal light" as recited by claim 1. As discussed above with respect to claim 7, Applicant's respectfully submit that Zah does not mention evanescent coupling, evanescent couplers, or specifically that the optical element 310 is an evanescent coupler or performs evanescent coupling of pump light with optical signal light.

Applicants respectfully submit that because Zah fails to teach or suggest "an individual optical amplifier having an evanescent coupler to combine pump light with optical signal light" Applicants respectfully submit that Zah fails to teach each and every element of the claimed invention as recited in claim 1. Nor has the Examiner has pointed another source for the proposition. Applicants respectfully submit that because Zah fails to teach or suggest each and every element of the claim 1 that claim 1 is patentable over Zah. Applicants respectfully submit that claims 2-6 properly depend from patentable claim 1 and are therefore patentable over Zah as well. Applicants respectfully submit that claim 21 properly depends from patentable claim 7 and are therefore patentable over Zah at least for the same reasons as claim 7 is patentable over Zah. Applicants respectfully request that the Examiner reconsider and remove the rejection to claims 1-6 and 21.

Rejection of Claim 5 Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Zah as applied to claim 1 above and in further view of common knowledge in the art. Applicants respectfully traverse the rejection.

Applicants respectfully submit that claim 5 properly depends from patentable claim 5 and are therefore patentable over Zah at least for the same reasons as claim 1 is patentable over Zah. Applicants respectfully request that the Examiner reconsider and remove the rejection to claim 5.

Rejection of Claim 21 Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Zah as applied to claim 7 above and in further view of U.S. Patent No. 6,137,939 to Henry et al. (hereinafter "Henry"). Applicants respectfully traverse the rejection.

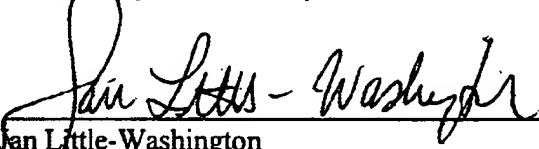
Applicants respectfully submit that claim 21 properly depends from patentable claim 7 and are therefore patentable over Zah at least for the same reasons as claim 7 is patentable over Zah. Applicants respectfully request that the Examiner reconsider and remove the rejection to claim 21.

CONCLUSION

Applicants submit that all grounds for rejection have been properly traversed or rendered moot, and that the application is in condition for allowance. The Examiner is invited to telephone the undersigned representative if the Examiner believes that an interview might be useful for any reason.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 12/27/2004


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